

32. A method for implementing a heartbeat protocol, comprising generating heartbeat messages by a single selected computer indicating the availability of resources on one or more computers, such that loss of heartbeat from the selected computer is indicative that all computer resources are unavailable, and the presence of a heartbeat from the selected machine is indicative that all computer resources are available.

33. The method of Claim 32 further comprising the step of the single selected computer requesting a new heartbeat rate, and upon agreement by the server to the new heartbeat, implementing the new heartbeat rate.

34. The method of Claim 32 further comprising the step of the server imposing at any time a minimum heartbeat period on the selected computer.

35. The method of Claim 32 further comprising the step of generating a message by the selected computer in accordance with the heartbeat protocol to indicate unavailability of the one or more computer resources.

36. The method of Claim 32 further comprising the step of generating a message by the selected computer in accordance with the heartbeat protocol to indicate unavailability of the one or more computer resources; and generating an acknowledgement of unavailability message by the server to the selected computer.

Please add the following new Claims 37-42:

--37. A method for implementing a heartbeat protocol, comprising:
receiving heartbeat messages generated by a single selected computer, the heartbeat messages indicating the availability of resources on one or more computers, such that loss of heartbeat from the selected computer is indicative that all computer resources are unavailable, and the presence of a heartbeat from the selected computer is indicative that all computer resources are available;

determining from the presence or absence of the heartbeat messages that all computer resources are available or unavailable; and

providing a response to a message query for the computer resources for which the heartbeat is absent that the computer resources are unavailable.